

SG2000/SG2500

Turnkey Station



High Yield

- Efficient three-level topology, max. system efficiency up to 99 %
- 1 or 4 MPPT, wide MPP voltage range
- Full power operation without derating at 50 °C
- One inverter unit fails, the other units continue operation



Easy O&M

- Integrated zone current monitoring function for fast trouble shooting
- Module design and front service, easy for maintenance
- DC circuit breaker design for convenient maintenance



Saved Investment

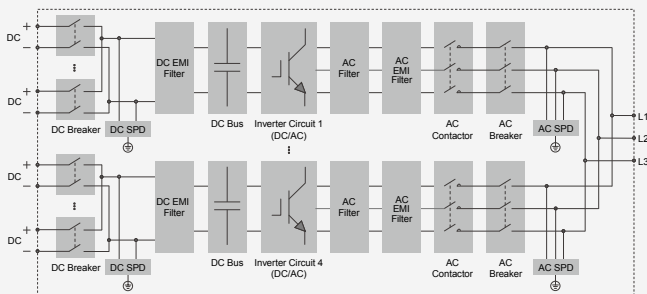
- 10-foot container design, no need to build extra inverter house
- Integrated LV auxiliary power supply



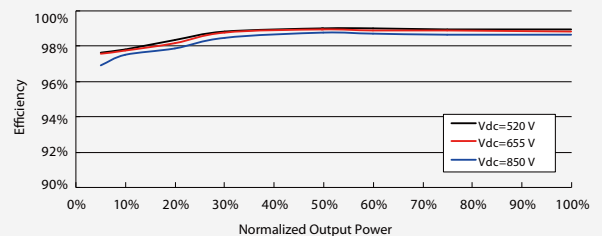
Grid Support

- Compliance with standards: CE, IEC 62109, IEC 61727, IEC 62116, G59/3
- Low/High voltage ride through (L/HVRT)
- Active & reactive power control and power ramp rate control

Circuit Diagram



Efficiency Curve



| Input (DC) | SG2000 | SG2500 |
|---|---|--------------------------------------|
| Max. PV input voltage | 1000 V | |
| Min. PV input voltage / Startup input voltage | 460 V / 500 V | 520 V / 540 V |
| MPP voltage range for nominal power | 460 – 850 V | 520 – 850 V |
| No. of independent MPP inputs | 1 or 4 | |
| No. of DC inputs | 24 – 32 | |
| Max. PV input current | 4880 A | 5424 A |
| Max. DC short-circuit current | 5840 A | 6780 A |
| Output (AC) | | |
| AC output power | 2200 kVA @ 45 °C / 2000 kVA @ 50 °C | 2772 kVA @ 45 °C / 25200 kVA @ 50 °C |
| Max. AC output current | 4032 A | 4444 A |
| Nominal AC voltage | 315 V | 360 V |
| AC voltage range | 252 – 362 V | 288 – 414 V |
| Nominal grid frequency / Grid frequency range | 50 Hz / 45 – 55 Hz, 60 Hz / 55 – 65 Hz | |
| THD | < 3 % (at nominal power) | |
| DC current injection | < 0.5 % I _n | |
| Power factor at nominal power / Adjustable power factor | > 0.99 / 0.8 leading – 0.8 lagging | |
| Feed-in phases / Connection phases | 3 / 3 | |
| Efficiency | | |
| Max. efficiency / Euro. efficiency | 99.0 % / 98.7 % | |
| Protection | | |
| DC input protection | Circuit breaker | |
| AC output protection | Circuit breaker | |
| Overvoltage protection | DC Type II / AC Type II | |
| Grid monitoring / Ground fault monitoring | Yes / Yes | |
| Insulation monitoring | Yes | |
| Overheat protection | Yes | |
| Anti-PID function | Optional | |
| General Data | | |
| Dimensions (W*H*D) | 2991*2591*2438 mm | |
| Weight | 6 T | |
| Isolation method | Transformerless | |
| Degree of protection | IP54 | |
| Auxiliary power supply | 220 Vac, 2 kVA / Optional: 415 Vac, up to 40 kVA | |
| Operating ambient temperature range | -35 to 60 °C (> 50 °C derating) | |
| Allowable relative humidity range (non-condensing) | 0 – 95 % | |
| Cooling method | Temperature controlled forced air cooling | |
| Max. operating altitude | 5000 m (> 3000 m derating) | |
| Display | Touch screen | |
| Communication | Standard: RS485, Ethernet; Optional: optical fiber | |
| Compliance | IEC 62109, IEC 61727, IEC 62116, IEC 60068, IEC 61683, CE, G59/3, CEA | |
| Grid Support | LVRT, HVRT, active & reactive power control and power ramp rate control | |
| Type designation | SG2000-10 | SG2500-10 |

